# THE U.S. DEPARTMENT OF ENERGY MARSHALL ISLANDS SPECIAL MEDICAL CARE PROGRAM FISCAL YEAR 2002 REPORT December 2002

The Department of Energy (DOE) Marshall Islands Special Medical Care Program continued, in this its 48th year, to provide medical surveillance for the populations of Rongelap and Utrik Atolls. The Program was implemented in 1954 by the Atomic Energy Commission following the accidental exposure of Marshallese to fallout from a nuclear test at Bikini Atoll. This report provides a summary of the special medical care program conducted on behalf of the DOE patient population during the past year.

Department of Energy (DOE)/Pacific Health Research Institute (PHRI) Special Medical Care Program in the Republic of the Marshall Islands (RMI)

**Annual Program Progress Report under DOE/PHRI Cooperative Agreement:** 

(July 1, 2001 – June 30, 2002)

#### **EXECUTIVE SUMMARY**

#### Introduction

The Marshall Islands Special Medical Care Program was mandated in Public Law 99-239, the Compact of Free Association Act of 1985; Public Law 96-205; and Public Law 95-134 on behalf of the Rongelap and Utrik people who were present on either of the atolls during the United States' (U.S.) March 1,1954, thermonuclear "Bravo" test. The program provides annual medical screening and on-demand care for illnesses and conditions resulting from exposure to radiation produced by the "Bravo" test. Public Law 99-658, Section 104(k), requires DOE to submit an annual report to Congress detailing how funds were spent for special medical care and logistical support. This report presents the work done during fiscal year (FY) 2002, the fourth year of a 5-year cooperative agreement between DOE and PHRI in collaboration with the University of Hawaii School of Medicine.

#### **Performance**

Four indicators have been identified that mirror how well the program is functioning: Capacity to do work, patient satisfaction, ability to communicate effectively, and completing examinations on time. There were improvements for three indicators. Clinical visits were essentially the same as last year.

<u>Indicator</u>	This Year	<u>Last Year</u>
Capacity: The number of clinical encounters of all types.	3,912	4,106
<b>Satisfaction:</b> The proportion of patients whose overall rating		
of the program is "good" on a scale of "good fair poor."	83%	57%
<b>Communication:</b> The ability of staff to locate and communicate		
with patients	92%	89%
<b>Completion:</b> The degree of completeness of the annual examination		
cycle in the same year	86%	74%

#### **Medical Management In-country**

Before this year, there were no U.S.-trained Marshallese physicians in the Marshall Islands. This year, a physician employed under the cooperative agreement between DOE and PHRI was appointed to direct clinical operations from Majuro. The director represents the program locally and coordinates patient care with the Marshall Islands' national health service and the U.S. Department of the Interior—funded 177 Health Care Program. Within the year, the productivity of the program increased, people appreciated having a Marshallese doctor, and coordination improved. The physician is also available to provide services in the Majuro Hospital as time and budgetary resources permit.

All of the DOE patients are eligible for a yearly thyroid ultrasound examination. This year the program purchased two portable, ultrasound devices and increased the number of visits by an endocrinologist to the islands. Not only can thyroid abnormalities be identified earlier, biopsies can be taken on the spot without having to refer patients to Kwajalein or Honolulu. The ultrasound units can be taken to remote

locations.

#### **Medical Referrals**

Referrals to Honolulu are only made if no local treatment is available. Referrals to Honolulu, Hawaii, for treatment and advanced diagnostic procedures are expected each year. Referral costs reflect the complicated illnesses and diseases of older persons and almost all of the DOE patients are over age 50. This past year, the referral cost was expected to be below \$200,000, but actually required about \$500,000.

#### **Next Year**

Next year we will: (1) consider the feasibility of moving our Kwajalein Island physician and staff to the new hospital on Ebeye Island adjacent to Kwajalein Island (where many of the DOE patients live); (2) evaluate the utility of continuing to rotate faculty and medical residents from the University of Hawaii School of Medicine in Honolulu to the Marshall Islands; and

(3) begin to train local doctors to utilize the portable ultrasound devices to monitor patients for thyroid nodules and thyroid cancer.

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# Annual Program Progress Report under Department of Energy (DOE)/Pacific Health Research Institute (PHRI) Cooperative Agreement #DE-FC03-98EH98035/A000

**Title of the Project:** Deliver Special Medical Care to the Marshall Islands for the

P.L. 99-239 DOE Patient Population of Rongelap and Utrik

**Principal Investigators:** Neal A. Palafox, M.D., M.P.H.

Henry N. Preston, M.D.

**Program Coordinator:** Lola M. Colombe

**Period Covered in this Report:** July 1, 2001 – June 30, 2002

#### I. Introduction

The DOE Marshall Islands Special Medical Care Program continued, in this its 48<sup>th</sup> year, to provide medical surveillance for the mandated population from Rongelap and Utrik and the additional DOE patients.<sup>1</sup> The program was inaugurated in 1954 by the Atomic Energy Commission following the exposure of Marshallese to fallout from a thermonuclear test (Castle Bravo) at Bikini Atoll. This year marks the 4th year in which the program has been carried out by PHRI under a cooperative agreement with DOE.

The DOE/PHRI Special Medical Care Program, awarded the cooperative agreement on August 28, 1998, commenced its health care program on January 15, 1999, on Kwajalein and January 22, 1999, on Majuro. This report details the program for the July 1, 2001, through the June 30, 2002, period.

<sup>&</sup>lt;sup>1</sup> The DOE patient population comprises the remaining members of the population of Rongelap and Utrik who were exposed to radiation resulting from the March 1, 1954, U.S. thermonuclear "Bravo" test (the mandated population) and additional DOE patients, formerly known as the control or comparison population (Marshallese individuals, not present on Rongelap or Utrik at the time of the "Bravo" test, but who roughly match the age and gender of the Rongelap and Utrik population identified in section 103(h)(l) of the Compact of Free Association Act and who volunteer to undergo an annual physical examination by program physicians).

The program provides year-round, on-site medical care to the DOE patient population residing in the Republic of the Marshall Islands (RMI) and annual examinations to those patients living in Hawaii and in the continental United States.

#### II. Major Accomplishments in Year 4

- Contacted 100 percent of those patients living outside of the RMI (22 in Hawaii and 15 in the continental U.S.) for completion of their annual examinations in Hawaii.
- Completed 165 of 208 annual examinations (for more detail see Section III Health Status of Population).
- Conducted four (two to each island) medical staff visits to Mejatto and Utrik to provide care (see exhibit 3).
- Provided thyroid specialist care for patients and training for the medical officers (MO) through Dr. Leonard Kryston, an endocrinologist who also provided care and expertise on diabetes.
- Hired a full-time Director of Clinical Operations, Dr. Sheldon Riklon, for the clinics on Kwajalein and Majuro.
- Installed the electronic medical record system (EMR) and conducted training for all staff.
- Provided additional medical care to patients in the RMI via the outpatient clinics at Majuro and Ebeye Hospitals, as well as during trips to Mejatto and Utrik (2,604 encounters).

#### **III.** Health Status of Population

Participation in this medical program is strictly voluntary. Currently, there are 119 of the mandated population and 89 additional patients being cared for by the program. DOE patient encounters total 1,308 visits for the year.<sup>2</sup> One patient passed away during this year and 13 patients have required referrals to the tertiary care facility, Straub Clinic & Hospital, Inc., in Honolulu, Hawaii (exhibit 1). The program made a concerted effort to contact each patient in the DOE patient population in order to complete their annual examination. One patient, who has not been seen by the program since 1976 and whose whereabouts are unknown, has been taken off the active patient listing for the time being. Should the patient reappear in the future, the program will resume medical care for this patient. One hundred sixty-five annual examinations have been completed during this year with 26 patients needing to complete a few required tests. Seventeen patients have yet to come in for their annual examinations.

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<sup>&</sup>lt;sup>2</sup> Encounters include patient visits for medication refills, annual examinations, laboratory tests, procedures, periodic checkups, and sick visits.

#### IV. **Program Administration and Physicians**

The DOE/PHRI Special Medical Care Program's staff, based in Honolulu, Hawaii, includes a principal investigator (PI), a Co-PI, three co-investigators, a program coordinator, a computer systems analyst, and a program assistant.<sup>3</sup> The staff in the RMI consists of one full-time Director of Clinical Operations,<sup>4</sup> one full-time MO on Kwajalein/Ebeye, one part-time MO on Majuro, and two half-time nurse coordinators (one each on Kwajalein and Majuro). Other program staff includes physicians from the University of Hawaii, John A. Burns School of Medicine, Department of Family Practice Residency Program.

In order to provide care to the DOE patient population, clinic oversight for the RMI staff, and conduct community meetings, which involve the patients in the planning of program activities, the administrative staff and physicians based in Hawaii have visited RMI on nine (9) different occasions from July 1, 2001, through June 30, 2002. These visits include:

- Two (2) visits by Dr. Neal A. Palafox, Principal Investigator: January 2002 and June 2002;
- One (1) visit by Dr. Henry N. Preston, Co-Principal Investigator: August 2001;
- Four (4) visits by Dr. Wilfred Alik, Co-Investigator: August 2001, December 2001, February 2002, and May 2002;
- One (1) visit by Lola Colombe, Program Coordinator: October 2001; and
- One (1) visit by Chris Welch, Computer Systems Analyst: October 2001.

Also of particular note during this year, six residents have chosen to repeat their rotations over the course of the year. These repeat rotations by the residents help the program provide continuity of care for the DOE patient population.

Bechtel Nevada Corporation (BN) (under DOE contract) continues to provide the logistical support to the special medical care program. Logistical support involves travel, per diem, and accommodation arrangements for staff and patients traveling between RMI and Honolulu, Hawaii, or beyond. BN has been instrumental in providing PHRI with the necessary infrastructure; i.e., trailers, vehicles, and travel support, for the program to operate. Furthermore, BN is also involved in providing the program's patients with logistical support for tertiary care, when deemed necessary, via a subcontract with Honolulu's Straub Clinic & Hospital, Inc.

program on a part-time basis.

<sup>4</sup> With the hiring of Dr. Riklon, rotations of faculty from the University of Hawaii medical school are on an as-needed basis only.

<sup>&</sup>lt;sup>3</sup> The only full-time staff are the computer systems analyst and the program assistant. The other staff work on the

#### V. Program Activities

The DOE/PHRI Special Medical Care Program provides year-round, on-site medical care to DOE patients residing in the RMI and annual examinations to those DOE patients living in Hawaii and in the continental U.S. During this year, the program provided the following medical and health-related services:

- Provided annual medical examinations (exhibit 1);
- Provided additional medical care personnel for the outpatient clinics at Ebeye and Majuro Hospitals;
- Made home visits to patients who were physically unable to visit the clinic;
- Continued diabetic support groups on Ebeye;
- Coordinated with Kwajalein Hospital for ancillary services, such as laboratories, radiology, and pharmacy;
- Implemented the portable thyroid ultrasound examination for both medical care and patient education;
- Trained and certified the endocrinologist to be able to read the portable ultrasound images;
- Made trips to Mejatto and Utrik (exhibit 3) to see patients residing on those atolls;
- Coordinated with other health care programs and facilities in the RMI, such as the RMI Ministry
  of Health and Environment (MOHE); 177 Health Care Program (HCP); and Ebeye, Majuro, and
  Kwajalein Hospitals; i.e., diabetes project on Ebeye;
- Coordinated visits by an endocrinologist to the Majuro and Kwajalein Clinics (1 week at each site);
- Made referrals to Ebeye, Majuro, and Kwajalein Hospitals, and Straub Clinic & Hospital, Inc., when necessary; and
- Provided continuing medical education program staff and RMI health care workers.

#### VI. Clinics

Two clinics were established for the program in January 1999, one on Kwajalein and the second on Majuro. The Kwajalein Clinic is currently staffed with a full-time MO and one half-time nurse coordinator. The Majuro Clinic is currently staffed with a full-time Director of Clinical Operations, one part-time MO, and one part-time nurse coordinator. All of the medical staff are Marshallese-speaking. In addition to the above, resident physicians from the University of Hawaii Family Practice Residency Program rotate to the RMI on a monthly basis. The resident physicians continue to see DOE patients in the DOE clinics 5 half days per week, as well as at the outpatient/specialty clinics at Majuro and Ebeye Hospitals approximately 2-3 half days per week and other patients as time and resources permit (see exhibit 1).

Since the commencement of the program, residents with the University of Hawaii School of Medicine

have been rotating to the Marshall Islands for a 1-month duration. These rotations further assist with health care delivery and capacity building in the Marshall Islands.

We are continuing to look at potential barriers in the delivery of care at the DOE/PHRI clinics located on Kwajalein and Majuro. More patients are making repeat visits to the clinic for ongoing care and medication refills, as they become more accustomed to clinic personnel and operations.

#### 1. Majuro Operations

The Majuro Clinic is located in a trailer near Majuro Hospital. The clinic is open between the hours of 1–3 p.m. (Monday) and 10 a.m.-12 p.m. (Tuesday - Friday) to see the DOE patient population. The office is staffed so that administrative work can be completed; i.e., finalizing chart notes and entering lab reports into the EMR system, making appointments for ancillary services at Majuro or Kwajalein Hospitals, and writing/completing the necessary reports.

Dr. Riklon is working full-time for the program in the RMI, and he has been interfacing well with Majuro Hospital and the RMI MOHE to develop the hospital's capacity; i.e., laboratory training and mammography. His presence on Majuro has made a difference in the program's workflow and patient volume. The monthly patient encounters for the Majuro Clinic were higher than they have been in the program's prior 3 years (an average of 46 patients per month from July 2001–June 2002 versus a monthly average of 25 over the past 3 years).

#### 2. Kwajalein Operations

The Kwajalein Clinic, located in a trailer near the Kwajalein Hospital, is staffed with one MO, Dr. Tom Jack, and one nurse coordinator, Bonnita Paul Patrick. The clinic is open from 1-3 p.m. (Tuesday - Saturday) to see the DOE patient population, but is staffed until 4:30 p.m. Between 3-4:30 p.m., the staff works on completing chart notes and entering laboratory reports into the EMR system, making appointments for ancillary services at Kwajalein Hospital, and writing/ completing the necessary reports. Often, the MO, who lives on Kwajalein, will work at the clinic before making rounds on Ebeye in order to do administrative work prior to the afternoon DOE clinic.

While the program hopes to eventually move the Kwajalein Clinic to Ebeye, we do not anticipate a move in the coming months despite the fact that the new Ebeye Hospital has been operational since April. The majority of the equipment (i.e., x-ray machines) in the new facility is not yet functional, and they are awaiting technical assistance from the equipment vendors. Furthermore, Ebeye is currently unable to support the program's needs with regard to Internet capabilities; hence the program would not be able to access its EMR system. This alone would make an immediate move to Ebeye problematic for the program.

Kwajalein Hospital has concluded an agreement with DOE to continue mammography services. In the

short term, the program has agreed to pay a flat rate<sup>5</sup> for mammography services (procedure and reading) only at Kwajalein Hospital. The program's long-term strategy, however, is to work with MOHE on Majuro to develop the capacity to conduct mammograms at Majuro Hospital. The MOHE has already begun getting the mammogram machine on Majuro in working order. A couple of mammograms have been completed and have been sent off-island to be read (results pending). An inspection team from the manufacturer of the machine is due to fly in, upon approval from the Marshall Islands Social Security Administration to get the machine certified. Two radiology technicians have been trained and certified for the mammogram machine. And, MOHE has been negotiating with a radiologist on Guam to read the mammograms.

#### 3. Hawaii Operations

The program and BN coordinated efforts again this year to contact the patients residing in the continental U.S. to complete their annual examinations. All of the patients contacted have either completed their examinations or are scheduled to be seen by the end of August 2002.

The program continues to look for ways to complete the patients' annual examinations in the geographic area where they reside. For patients who reside in Maui, laboratory tests continue to be done onsite via a contract with Clinical Laboratories.

For those patients who reside in Hawaii, we continue to see them at the Physicians Center in Mililani or at Straub Clinic & Hospital for their annual examinations.

#### VII. Endocrinologist

In January 2002, Dr. Kryston, an endocrinologist from Straub Clinic & Hospital, spent 1 week at each DOE clinic in the RMI. He conducted thyroid palpations, took biopsies as needed, conducted thyroid ultrasounds using the portable machine, conducted fine needle aspirations, and provided consultations for non-DOE patients. Dr. Kryston also provided the expertise to make sure the program's physicians had the proper and appropriate technique for thyroid palpations.

#### VIII. Thyroid Examinations

Currently, thyroid ultrasounds are conducted on a yearly basis on the DOE patient population. Thyroid palpations, to date, have been conducted by an endocrinologist, the program's medical faculty, MO's, and residents, with the faculty physicians and the endocrinologist providing the necessary supervision on the proper and appropriate technique. During program year 5, thyroid ultrasounds on the DOE patient population will be conducted using the handheld ultrasound machine. Dr. Kryston, who was certified in reading thyroid ultrasounds in May 2002, will be doing the readings.

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<sup>&</sup>lt;sup>5</sup> This rate will include the newly instituted reading charges (effective 10/1/02) for mammograms.

#### IX. Medical Records

One of the fundamental goals of the program is to improve the health status of the mandated population. One means for reaching this goal was the introduction of an EMR system that allows for real time access to medical information by practitioners in the Marshall Islands and in Hawaii. Real time access means that decisions can be made with the latest information. The EMR has helped us to improve the quality of care, as the same patient information is available at each clinical site at any given moment. This is especially important in this program where we have a mobile patient population.

In June 2002, Dr. Riklon, along with the computer systems analyst, the program coordinator, and the program assistant, received training from Physician Microsystems in the use of the appointment scheduler program. The scheduler will enable us to: (1) keep better track of patient volumes; (2) schedule followups with reminders; and (3) reduce the flow of paper between RMI and Honolulu (the program can now electronically look at the daily schedule rather than wait for calendars to be sent via mail). It will also eliminate redundancy, provide real time access to health care information, and allow for quality assurance and quality control of medical record data.

While the Kwajalein Clinic can access and change records with little apparent lag caused by network performance, the Majuro Clinic suffers from significant lag times. This causes noticeable wait times between activities performed on the EMR. In short, Majuro Clinic's reliance upon dial-up service to the National Telecommunications Authority (NTA) for access to the EMR significantly impacts the usability of the system. This issue is also relevant to the prospect of a move to Ebeye--it is assumed that the communication infrastructure on Ebeye is of the same caliber as that on Majuro, and would, hence, have similar shortcomings. More detailed research and analysis are required before moving the record system off Kwajalein and on to Ebeye in order to assure a successful transition from one setting to the other.

The program is currently working with Peacesat to increase Majuro's bandwidth via satellite hookup. Peacesat is a noncommercial, publicly available, satellite audio-video system.

#### X. Telehealth

In order to facilitate telehealth capabilities, the computer analyst has continued to pursue broadband connectivity for Majuro. The EMR system on Majuro, while up and running, is often slow and erratic. In order to use the system on a consistent basis, the clinic needs to have reliable and consistent Internet service. To date, NTA has not been able to provide this regularly. This will be a major issue for the program should the clinic move from Kwajalein to Ebeye.

The computer systems analyst continues to monitor and make revisions to both the public and secure website, which can be found on the Internet at: **http://www.phri-doe.org**. The program's connections

through the telehealth associations and the National Library of Medicine allow the program to receive and send important, up-to-date health information to the RMI staff, as well as to other medical centers in the RMI. This provides an ongoing source of continuing medical education for the RMI health professionals.

#### **XI.** Quality Assurance

As records are entered in the new EMR system, audits are conducted in Honolulu by the computer systems analyst, the program coordinator, and the program assistant. The records are checked for accuracy, as well as for completeness.

Dr. Riklon's role has been instrumental to both patient care and program operations. Dr. Riklon has helped to improve communications in the program, identify patient needs, and increase interaction with other health providers in the RMI and provide onsite supervision of the MO's and residents.

The program continues to administer patient satisfaction forms. There has, however, been some difficulty in getting the forms completed. To date, approximately 139 forms have been received for the year. Often, the patient fails to complete the form. Results from this year's survey are shown in exhibit 4. In comparison with last year, access to the clinic has shown a marked improvement (83 percent versus 57 percent rated as "Good").<sup>6</sup> Other improvements were in the following categories:

- Nurses providing information to the patient (98 percent versus 89 percent);
- MO providing information to the patient (85 percent versus 76 percent);
- Trust in the MO (94 percent versus 75 percent);
- Competence shown by the Honolulu physicians (85 percent versus 80 percent); and
- Trust in the Honolulu physicians (85 percent versus 76 percent).

#### XII. Future Plans

The following activities are planned in Year 5.

#### Clinics:

The program will continue to have two clinics in the RMI; however, there is a possibility of the Kwajalein Clinic moving to Ebeye contingent upon the new hospital's ability to meet the program's needs as outlined below. This will be a challenge for next year and the following concerns/issues will need to be addressed as mentioned in PHRI's prior year continuation application:

- The need to have 24-hour electricity, water, and sewer service guaranteed;
- An estimate of the cost for electricity, water, and sewer service;

<sup>6</sup> The percentages noted are a comparison of the "Good" ratings between the Year 4 and Year 3 surveys.

- Housing requirements for PHRI faculty, residents and TDY staff on Ebeye;
- Possible housing requirements for the MO;
- The need for transportation/vehicle on Ebeye for program physicians and staff;
- How to handle supplies/cargo from Kwajalein;
- Status/need for trailer on Kwajalein; and
- Internet access and availability, as well as speed for the EMR system.

All the above issues will need to be resolved before the move takes place; and discussions among the DOE/PHRI administrative staff, Ebeye Hospital, MOHE, DOE, and BN will be ongoing.

#### Procedures:

Procedures, with the exception of mammograms and thyroid ultrasounds, will continue as currently offered. There will, however, be a significant increase in procedure rates effective October 2002 for those services done at Kwajalein Hospital. Some of the new rates being charged have not been charged in the past; i.e., reading fee for radiology services, facility fees for procedures. For example, under the current pricing system, an abdominal ultrasound costs \$150, but effective October 1, 2002, the procedure will cost \$300. Kwajalein Hospital is currently overhauling its billing processes with regard to charges and has received clear direction from the U.S. Army--Kwajalein to cover more of its operating expenses. More of these types of increased costs will be passed on in the next fiscal year, and we have not been notified with regard to all the specifics.

In addition, as of July 31, 2002, the U.S. Army command at Kwajalein said that it would discontinue mammography services unless our program agreed to a negotiated flat rate for mammography services only (procedure and reading). In the short term, we have agreed to this rate; however, in the long term, the program hopes to offer screening mammography at Majuro, once and if its machine and technicians are certified and meet the U.S. Food and Drug Administration (FDA) standards as required by DOE. The program is currently looking into the requirements for bringing the Majuro facility into compliance with FDA standards; i.e., costs and training.

With regard to thyroid ultrasounds, in Year 5 they will be conducted using the portable handheld ultrasound machine with Dr. Kryston doing the readings. He was certified to read thyroid ultrasounds in May 2002. There will no longer be a need to use the Kwajalein Hospital facilities for this service.

#### Consultants:

Consultants will be sent to complement ongoing medical care, as needed and as resources permit, based on clinic findings. Dr. Kryston will increase his visits from two to four annual visits to RMI to conduct thyroid ultrasounds and readings, do quality assessments in thyroid and diabetes care with the medical staff, and update staff on advances in diagnosis and care in those areas. He will also provide direct patient care in these areas. The flexible sigmoidoscopy trainer will make three visits to RMI to do

quality assessments and conduct flexible sigmoidoscopies on patients.

#### Medical Records:

The EMR system will continue to be utilized and templates updated as needed. The program is looking at various options to secure better and more assured communications for the EMR, as well as for digital communication (e-mail) in general.

The program purchased the EMR system from Physician Microsystems based upon the Internet capabilities in the RMI at the time. The underlying software that supports remote access to the EMR was chosen with the knowledge that users in the RMI, primarily on Majuro, would be using modems to access the EMR. On Majuro, however, the data speeds have deteriorated to a point where they are creating a major obstacle in the use of the EMR, as well as basic e-mail. This has a major impact on the program's capabilities to communicate between Honolulu and RMI and between the two DOE clinics.

#### Telehealth:

The program's website will continue to be monitored and kept up to date. Updates and revisions will be made on an as-needed basis. Consultations via e-mail and the program's website will continue in Year 5.

The program will actively explore the connectivity issue, particularly with respect to Majuro, Ebeye, and the outer atolls.

In Year 5, the program will continue work with collaborators to explore possible means to provide eye care. If resources permit, we had hoped to purchase two ocular scanners for transmittal of retinal images to Hawaii for reading. The patient population has repeatedly asked for specialty eye care. Since a large number of the patients are diabetic with associated eye problems, using the scanners would enable the program to detect possible problems before they are beyond repair. We are working with other health programs to see how the conditions discovered in such a program could be addressed and to conduct a needs assessment in this area.

#### Program Administration:

Dr. Palafox will continue as Principal Investigator, Dr. Preston as Co-Investigator, and Dr. Riklon as Co-Investigator/Director of Clinical Operations.

#### XIII. Acknowledgments

The program would not have been possible without the enormous amount of time, effort, support, cooperation, and patience of so many individuals and organizations. Their efforts were above and

beyond the call of duty. We would like to especially thank the various RMI Government officials and community leaders; U.S. DOE; physicians and staff from the University of Hawaii School of Medicine; Wahiawa General Hospital; Straub Clinic & Hospital, Inc.; Kaiser Permanente; Ebeye and Majuro Hospitals; Bechtel Nevada; PHRI; and the tireless efforts of the program's MO's and nurse coordinators.

#### XVII. Exhibits

Exhibit 1

# Patient Statistics for July 1, 2001 – June 30, 2002 (1)

Location	DOE Patient Encounters (2)	Non-DOE Patient Encounters (3)	Deaths	Referrals to Hawaii	Annual Examinations (4)
Ebeye	85	1,093	0	1	55 (47)
Kwaja lein	538	-	-	-	-
Majuro	557	1,481	0	3	68 (56)
Mejatto	16	19	0	1	20 (14)
Utrik	20	11	0	1	12 (12)
Hawaii	53	-	1	5	21 (21)
CONUS	39	-	0	2	15 (15)
Total	1,308	2,604	1	13	191 (165)

#### Note:

- (1) Statistics: from July 1, 2001, through June 30, 2002.
- (2) Encounters: Total number of DOE patients who came to the clinic on any given day for medication refills, annual examinations, sick visits, laboratory tests, procedures, and followups. Kwajalein encounters include visits for medical procedures that could not be conducted at Majuro, Mejatto, or Utrik clinics. CONUS and Hawaii numbers include 33 prescription refills sent to patients and annual examination visits conducted in Honolulu.
- (3) Total number of non-DOE patients seen at outpatient clinics at Ebeye and Majuro Hospitals and on trips to Mejatto and Utrik by the MO's, residents, and faculty.
- (4) The first number represents the number of annual examinations begun during the period; the number in the parentheses indicates annual examinations completed during this period.

Exhibit 1

DOE Patient Encounters – Kwajalein Clinic
July 1, 2001 – June 30, 2002

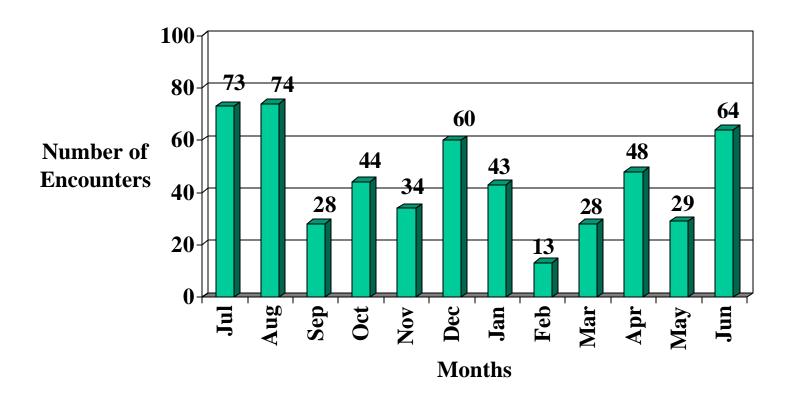


Exhibit 1

DOE Patient Encounters - Majuro Clinic
July 1, 2001 - June 30, 2002

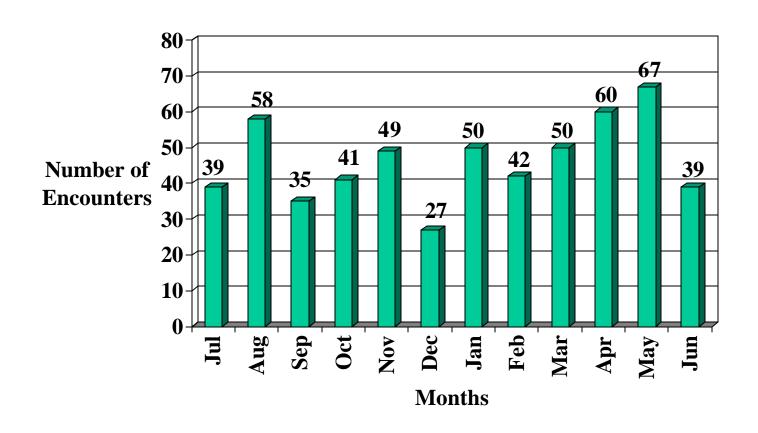


Exhibit 2

<u>Average Number of DOE Patient Encounters at Majuro Clinic Per Year</u>

January 1999 – June 2002

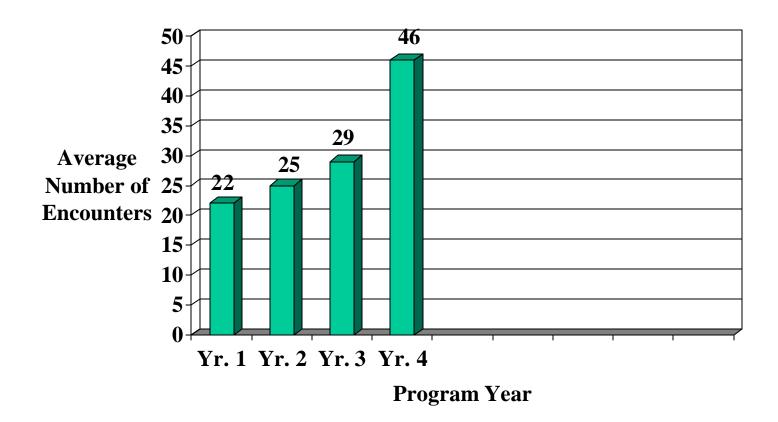


Exhibit 3

# **Mejatto and Utrik Trips**

DATE	ATOLL	PHYSICIANS/STAFF*	PATIENTS SEEN
September 2001	Utrik	Sheldon Riklon, M.D. Kazu Hernandez, M.D. Hemiko Bingham, NC	DOE 8 Non-DOE 6
October 2001	Mejatto	Dr. Tom Jack, MO Kazu Hernandez, M.D. Bonnita Patrick, NC	DOE 5 Non-DOE 14
January 2002	Mejatto	Neal Palafox, M.D. Sheldon Riklon, M.D. Bonnita Patrick, NC	DOE 11 Non-DOE 5
January 2002	Utrik	Neal Palafox, M.D. Sheldon Riklon, M.D. Zach Zachraias, MO	DOE 12 Non-DOE 5

NOTE: MO = Medical Officer; NC = Nurse Coordinator

# Exhibit 4

# **Patient Satisfaction Survey**

# Ejmour Mokta - DOE/PHRI Special Medical Care Program PATIENT SATISFACTION SURVEY

DA	ГЕ:	CLINIC SI	TE:	ISLAND/ATOL RES:	MR#
<u>IN</u>	TRODUCTION	<u>1</u>			
	s survey will be ab ng this past year.	out the manner	in which the med	dical treatment/services you have rece	ived at this DOE/PHRI clinic was given
All	information will b	e kept complete	ly confidential.	Thank you for your participation	
cate					ng the past year. Please circle <u>one</u> of the ceptable; <u>Poor</u> means you rate the service
Α.	The first question	on is about clin	ic access.		
A1.	1. How would you grade how easy it is to be seen at the DOE/PHRI clinic?				
	Good	Fair	Poor		
В.	Now let's talk about the professional staff at this clinic. First, the <u>nurse</u> .				
B1.	1. Please grade the nurse on her friendliness, helpfulness, and professionalism.				
	Good	Fair	Poor		
B2.	And how would	you grade the n	urse on her comp	betencethat she is thorough and know	ledgeable?
	Good	Fair	Poor		
В3.	How would you	grade the nurse	in telling you wh	nat you need to know?	
	Good	Fair	Poor		
C.	Now let's think	about the phys	ician or other pi	roviders you may see at the clinic.	
C1.	Please grade the	medical officer	on his friendlines	ss, helpfulness, and professionalism.	
	Good	Fair	Poor		
C2.	And how would	you grade the m	nedical officer on	his competencethat he is thorough a	nd knowledgeable?
	Good	Fair	Poor		

C3.	How would you	How would you grade the medical officer in telling you what you need to know?			
	Good	Fair	Poor		
C4.	And grade how	much you feel yo	u trust the medical officer at this clinic.		
	Good	Fair	Poor		
D1.	Please grade the	e doctors from Ho	nolulu on their friendliness, helpfulness, and professionalism.		
	Good	Fair	Poor		
D2.	And how would	l you grade the do	ctors from Honolulu on their competencethat they are thorough and knowledgeable?		
	Good	Fair	Poor		
D3. How would you grade the doctors from Honolulu in telling you what you need to know?			s from Honolulu in telling you what you need to know?		
	Good	Fair	Poor		
D4.	And grade how	much you feel yo	ou trust the doctors from Honolulu at this clinic.		
	Good	Fair	Poor		
E1.	Please grade ho	w satisfied you ar	e with the results of the medical care you have received at this clinic.		
	Good	Fair	Poor (Why?)		
F1.	Thinking about	your overall exper	ience with this clinic, what overall grade would you give to this clinic?		
	Good	Fair	Poor		

THANK YOU FOR YOUR PARTICIPATION, PLEASE RETURN YOUR COMPLETED SURVEY TO THE PERSON WHO GAVE IT TO YOU.

Exhibit 4

<u>Patient Satisfaction Survey Results</u>

